

Amendment to the Claims

1. (currently amended) A method comprising:

creating a plurality of nanotubes, the nanotubes each having a substantially cylindrical wall and a plurality of magnetic atoms that are ~~encircled by~~ attached to the wall;

aligning the nanotubes on a grid having metal lines, such that each of the nanotubes has a first portion that overlaps a metal grid line and a second portion that does not overlap the metal grid line; and

removing the second portions.

2. (original) The method of claim 1, wherein creating the plurality of nanotubes includes arc discharge, laser evaporation or chemical vapor deposition.

3. (original) The method of claim 1, wherein creating the plurality of nanotubes includes forming small cluster of magnetic atoms in the nanotube, such that the nanotube exhibits superparamagnetism at room temperature.

4. (currently amended) The method of claim 1, wherein creating the plurality of nanotubes includes forming a magnetic alloy containing cobalt, nickel or iron in the ~~nanotube~~ nanotubes.

5. (currently amended) The method of claim 1, wherein aligning the nanotubes on the grid includes applying a magnetic ~~force~~ field of less than 2 Tesla.

6. (original) The method of claim 1, wherein aligning the nanotubes on the grid includes scanning a row of sharp tips over the grid.

7. (currently amended) The method of claim 1, wherein removing the second portions includes applying ~~an electric current to the grid~~ a voltage between metal lines.

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8. (original) The method of claim 1, wherein removing the second portions includes etching the second portions with the grid as an etching mask.
9. (withdrawn)
10. (withdrawn)
11. (withdrawn)
12. (withdrawn)
13. (withdrawn)
14. (withdrawn)
15. (withdrawn)
16. (withdrawn)
17. (withdrawn)
18. (currently amended) The method of claim 1, wherein the grid of metal line having metal lines is made up of ferromagnetic materials.
19. (currently amended) The method of claim 1, wherein the length of nanotubes is longer than the spacing between neighboring two adjacent metal lines of the grid.
20. (currently amended) The method of claim 18, wherein aligning the nanotubes on the grid includes applying a magnetic field.

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21. (new) The method of claim 1, wherein aligning the nanotubes on the grid includes applying a magnetic field gradient.

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